

What is DSC?

It is not only the red button added in 1999 on your marina VHF radio.



Digital selective calling (DSC) is required by FCC for all new models sale in the United States after June 1999. The main goal of the DSC system is to improve the reception and identification of calls. On the VHF marine radio, channel 70 is dedicated to digital service. While activating the red button, a digital alert is sent containing the identity of your vessel (MMSI – Maritime Mobile Service Identity), the time of transition, and present position if you have interface to GPS. This message is repeated until it is acknowledged by a shore station or another DSC outfitted vessel. Remember voice communication is NOT allowed on channel 70. The DSC system can be use to establish a private call by transmitting to another MMSI number. The MMSI allows receiving only these calls addressed to the individual radio. If the radio is connected to the GPS or Loran over the NMEA (National Marine Electronics Association 0183 or 2000) interface, the other DSC radio can call your vessel using your MMSI and request your position digitally.

Most VHF –DSC marina radios are Class D or SC101. Class D contains a minimum capabilities such as: distress call, all-ships call, individual station call, use of distress, urgency, safety, and routing priorities, nature of distress, distress coordinates, time for last position, type of communication, radio VHF channel, display, alarm, and receive distress relay and distress acknowledgement calls. The RTCM SC101 contains additional use of safety priority for MF and HF only, received geographical calls and test calls (MF and HF only).

You need to register your radio to obtain the MMSI number. Note, that the FCC requires recreational boaters who install DSC radios to obtain an MMSI and program it into the radio before using the DSC functions. If you don't travel to foreign ports or talk to foreign stations you may apply online at <http://www.boats.com/mmsi/> or <http://www.seatow.com/>. This application is free.

For all entering foreign ports apply directly to the FCC. See the following procedure steps:

You will first need to register and receive an FCC Registration Number if you have not done so.

To register for your FCC Federal Registration Number (FRN) please follow the instructions below:

- 1) Go to web site <http://wireless.fcc.gov/uls>.
- 2) Click on Register
- 3) Click on Register and receive your FRN'.
- 4) Change the bullet to indicate "Business". If you have an address other than United States or its territories change the address bullet, click continue. The Registration Information screen will appear.
- 5) Complete all areas that contain the red (\*) asterisk, as these are required fields for the filing. If you have a Social Security Number you must enter that number in the appropriate box. If you do not have a Social Security Number you must select one of the reasons from the drop down box. If the contact information is the same as that above click the box listing Same as Above.
- 6) Review the information you just entered and if no corrections are needed scroll to the bottom of the screen and enter a password of at least 6 characters in Password. You will enter this same password in the re-enter password box. In the hint box enter something that would prompt you to remember this password. Please Note: This password will be used with your FRN when accessing the ULS and is case sensitive.
- 7) Click the Submit button. You will now receive the FRN number and will also see the registration information submitted. You now have the opportunity to link to other areas from this area. To continue on to another FCC Filing system, select: Universal Licensing System to link your call signs or to do an online filing in ULS.
- 8) To link your call signs Click on Call Sign/ASR Number Registration.
- 9) Your FRN will prefill. Enter your password and click continue.
- 10) Click on Enter Call Sign(s) button. Type each of your call signs in one of the fields provided. When finished, click on the Submit button. A confirmation screen will appear. Click Home to take you back to the ULS Home page.

For a manual filing the FCC 605 (main form), Schedule B and 159 (fee remittance) are required. If you currently do not have an FCC Registration Number (FRN) form 160 would also be needed for a manual filing. These forms can be obtained via web site: [www.fcc.gov/formpage.html](http://www.fcc.gov/formpage.html).

Electronic filers would utilize website: <http://wireless.fcc.gov/uls>. Click Register, if you do not have an FCC Registration Number (FRN). Continue through the steps until you receive a FRN then proceed to ULS online filing.

- 1) Click Log In under the Online Filing heading.
- 2) Enter your FRN and password. If you do not have your password or have forgotten it and have set a Personal Security Question (PSQ) go to web site <http://esupport.fcc.gov/password.htm> and select Reset Password, enter your FRN and answer the PSQ allowing you to reset your password. If you have not set the PSQ go to web site <http://esupport.fcc.gov/index.htm> and submit a reset password form or call (877) 480-3201 for assistance.
- 3) On the My Licenses screen, click on the link Apply for a New License
- 4) On the Select Service screen, SA /SB Ship License
- 5) Answer the questions on the following screens; navigate through each screen by clicking on the Continue button.
- 6) On the Certification screen, 'sign' the application by typing your name in the appropriate boxes.
- 7) Click the Submit Button. You will receive a confirmation screen giving you the file number for the application submitted and the fee payment options will also be available. You can make the fee payment online or print out the 159 and submit it with payment (check, money order, credit card) to: Federal Communications Commission, Wireless Bureau Applications, P. O. Box 358994, Pittsburgh, PA 15251-

5994. (The FRN will be needed to access the 159 form for the electronic filing). This fee must be received within 10 calendar days of the filing.

If you would like assistance with this filing, please contact the ULS Customer Support Hotline at 1-877-480-3201 and select option 2 at the menu.

Additional references:

<http://www.vhf-dsc.info/>

[http://www.usps.org/e\\_stuff/seminars/vhf\\_sem.htm](http://www.usps.org/e_stuff/seminars/vhf_sem.htm)

[http://www.idiyachts.com/dsc\\_with\\_vhf\\_marine\\_radio.htm](http://www.idiyachts.com/dsc_with_vhf_marine_radio.htm)

